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**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

In re EXPRESS MOBILE CASES

Case Nos. 3:19-cv-06559-RS
3:20-cv-06152-RS
3:20-cv-08297-RS
3:20-cv-08321-RS
3:20-cv-08335-RS
3:20-cv-08339-RS
3:20-cv-08461-RS
3:20-cv-08491-RS
3:20-cv-08492-RS
3:21-cv-01145-RS
3:21-cv-02001-RS

DEFENDANTS' CLAIM CONSTRUCTION BRIEF

TABLE OF CONTENTS

		Page	
2	I.	INTRODUCTION	1
3	II.	BACKGROUND	1
4	III.	TERMS FOR CONSTRUCTION.....	3
5	A.	Application/application ('755 patent, '287 patent, '044 patent)	3
6	1.	The Application is “separate from” the Player	4
7	2.	The Application is interpreted or executed by the Player.....	6
8	B.	Player/player ('755 patent, '287 patent, '044 patent)	8
9	1.	The Player is “device-specific code.”	9
10	2.	The Player is “executable code.”	12
11	C.	device-dependent code / device dependent code ('755 patent, '287 patent).....	15
12	D.	device-independent code / device independent code ('755 patent, '287 13 patent).....	18
14	E.	web component ('755 patent, '287 patent, '044 patent)	18
15	F.	Each symbolic name has an associated data format class type 16 corresponding to a subclass of User Interface (UI) objects that support the 17 data format of the symbolic name ('287 patent, '044 patent)	21
18	G.	preferred UI object ('287 patent, '044 patent)	23

TABLE OF AUTHORITIES

Page(s)
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

1 **I. INTRODUCTION**

2 Express Mobile's vague constructions broaden the claims beyond the scope supported by the
 3 disclosures of the '755, '287, and '044 patents. By contrast, Defendants' constructions are supported
 4 by the intrinsic record and how a person of ordinary skill in the art would have understood the disputed
 5 terms. This Court should adopt Defendants' proposed constructions.

6 **II. BACKGROUND**

7 The purported invention claimed in the '755 patent family¹ "generally relates to providing
 8 software for mobile devices." ('755 patent at 1:7-8.) The applicants' stated goal was to overcome
 9 "time consuming and expensive" practicalities of programming for a myriad of different mobile
 10 devices with every desired update. ('755 patent at 1:23-26.) The suggested improvement rests on
 11 three principal, interacting software components: Applications, Players, and an authoring tool, which
 12 are claimed in various combinations in the asserted claims.

13 As the patent describes, Applications provide the desired updated experiences to end users.
 14 But, instead of needing to be coded for specific devices, Applications comprise device-*in*dependent
 15 code that can be distributed in the same form to all devices, avoiding the need for programming each
 16 update differently for each of a myriad of devices. That device-independent code in the Application,
 17 however, still needs to be interpreted so that specific devices can process it. Players fill that role,
 18 interpreting or executing the Applications, and differ from Applications in that they comprise device-
 19 dependent code that each device is already able to process fully. Finally, the authoring tool lies at the
 20 conceptual core of the described system. As the patent describes, a user of the authoring tool "can
 21 produce an Application and Player that produces the same display and desired programming on [the]
 22 device." ('755 patent at 8:27-31.)

23 The '755 patent illustrates this relationship between end user devices, authoring tool,
 24 Application, and Player in a number of its drawings. For example, Figures 1A and B show how the
 25 myriad of users can be serviced by a system built around an authoring platform. And, Figure 2A
 26

27 ¹ The '755 patent, '287 patent, and '044 patent share a common specification. Citations and
 28 references herein are to the '755 patent specification, but apply equally to the asserted claims in
 the '287 patent and '044 patent, unless otherwise noted.

1 provides further granularity, illustrating how the authoring platform separately provides Players and
 2 Applications to devices. Figure 13 goes a step further in illustrating device specific characteristics
 3 that determine which Player is sent to which device.

4 The user of the authoring tool further can choose components from various web services she
 5 wishes to incorporate into her Application and choose the user interface (UI) object that will be used
 6 to receive inputs from or display outputs to an end-user related to the chosen component. (*See* '755
 7 patent at 8:18-53.) Web services are software systems designed to support interoperable machine-to-
 8 machine interactions over a network. (*See* '755 patent at 1:33-36, 8:18-19.) For example, if the user
 9 wants to display an RSS feed, the user would select the desired RSS feed from a registry of available
 10 feeds.² The user would select the RSS feed she wants from the registry of feeds available. The user
 11 would then associate the outputs of that web service (e.g., the “item-description” shown at
 12 XMO_00002266) to a desired UI object that is useful to display that datatype.³

13 The '755 patent applicants urged that this overall arrangement of authoring tool, Applications,
 14 Players, and web components allowed ready adaption to new devices coming on the market or web
 15 services offering new capabilities. In the former instance, the envisioned system creates and
 16 distributes a new Player for the new devices; in the latter, the system distributes a new Application
 17 that can use the new web services. Indeed, the applicants summarized their understanding that these
 18 advantages supported patentability during prosecution as follows:

19 In one aspect of the present invention, the device-independent Application and device-
 20 dependent Player are both provided to a device, such as a smartphone. Both codes are
 21 executed or interpreted on the same device, which communicates with a web service.
 22 By partitioning code for accessing web services into an Application and a Player has
 23 an advantage for maintaining websites. Thus, for example, code that is device specific
 24 may be maintained separately from code that is web service specific. If a new device
 25 comes on the market, or if it is found that the device-dependent code for a specific
 26 device needs an update, a new Player is developed and provided to those specific
 27 devices. Likewise, if new capabilities are provided for certain web services, or if a
 28 new web service is available, then a new Application is developed for those web
 29 services, and provided to devices requesting those services.

² See '755 patent at 9:17-26. “RSS” stands for Real Simple Syndication and an RSS feed provides subscribers to the feed with updates to the associated website in a standardized format. (*See* Exh. 1 at XMO_00002266 (showing a “USA Today Top Stories” RSS feed in the web component registry).)

³ See '755 patent at 9:17-26.

As one example of the operation of the Application and Player on a device, the device receives an executable code in the form of a Player. The device also receives an Application that is a device-independent code containing web service information. The execution of the Player on the device causes the Application to be interpreted and the following actions to occur on or in communication with the device: a display requesting web service input is provided, a web service request is generated and provided to the web service, the resulting web service output is received, and a display representative of the output is generated.⁴

The specification of the '755 patent consistently touts as an alleged advantage of the Player/Application dichotomy the fact that "all of the device-dependent programming is provided to the device only once (or possibly for some small number of upgrades), permitting a smaller Application, which is the same for each device."⁵

III. TERMS FOR CONSTRUCTION

A. Application/application ('755 patent, '287 patent, '044 patent)

Express Mobile's Proposed Construction	Defendants' Proposed Construction
Device-independent software code containing instructions for a device	Device-independent code that is separate from the Player/player and is interpreted or executed by the Player/player

As the file history and specification of the '755 patent confirm, the purported invention is based on two different sets of code. The first, called an Application, is designed such that it can be understood by all devices, regardless of any differences in hardware or operating system. The second set of code is called a Player, and it is specific to particular types of computers and functions to make the device-independent Application run on a specific device. The parties agree that "Application" or "application" (hereinafter, "Application") is device-independent code,⁶ but dispute: (1) whether the Application and the "Player" or "player" (hereinafter, "Player") are separate; and (2) whether the Application is interpreted or executed by the Player.

⁴ Exh. 8 at XMO_00002998.

⁵ '755 patent at 5:51-55.

⁶ Substantively, Defendants do not dispute that the "code" is software and contains instructions for a device, as set forth in Express Mobile's proposed construction, but this additional language is unnecessary and redundant, given that "code" in this context is software that contains instructions for a device.

1 **1. The Application is “separate from” the Player**

2 Application and Player are separate and distinct elements in the claims, as Express Mobile
 3 acknowledges. (Opening Br. at 6 ('755 and '287 claims “separately recite ‘an Application . . . and a
 4 ‘Player...’); *id.* ('044 claims “convey separation between the functions of the application and player
 5 code”).) The prosecution history further confirms and clarifies that the Application is separate from
 6 the Player. Indeed, the applicants explicitly distinguished the claimed invention from the *McCain*
 7 prior art on this basis:

- 8 • There “is no teaching or suggestion in [the prior art] *McCain* of an authoring tool that
 9 provides **two separate codes**: a device-dependent code (such as the claimed Player)
 10 and device-independent code (such as the claimed Application).”⁷ (Exh. 4⁸ at
 XMO_00002803.)
- 11 • “The solution of *McCain* is one code that is delivered to the device . . . There is no
 12 teaching or suggestion in *McCain* of **separating** binary, non-binary, or executable
 components into **different codes**. (*Id.* at XMO_00002802-2803.)

13 The applicants’ clear and unambiguous distinction of the claimed invention from the prior art on this
 14 basis gives rise to prosecution history disclaimer because the applicants narrowed the scope of the
 15 claimed invention to “separate codes” to overcome the prior art. *See, e.g., Biogen Idec, Inc. v.*
GlaxoSmithKline LLC, 713 F.3d 1090, 1095 (Fed. Cir. 2013) (finding disclaimer applies). Express
 16 Mobile now argues that the applicants distinguished *McCain* only based on it lacking a player and
 17 application, as opposed to *separate* player and application codes. But the quoted excerpt shows that
 18 the applicants expressly argued that: “[t]here is no teaching or suggestion in *McCain*” that “provides
 19 two separate codes” or “separating” codes. (Exh. 4 at XMO_00002802-2803.)

20 Even if this evidence did not rise to the level of disclaimer, the applicants’ repeated and
 21 consistent statements about the separateness of the Application and Player support Defendants’
 22 proposed construction. *See, e.g., Personalized Media Commc’ns, LLC v. Apple Inc.*, 952 F.3d 1336,
 23 1345-46 (Fed. Cir. 2020) (“the Board erred by effectively requiring the prosecution history evidence
 24 to rise to the level of a disclaimer in order to inform the meaning of the disputed claim term”). For
 25 example, in addition to the arguments referenced above, the applicants also explained to the Patent
 26

27 ⁷ All emphasis is added herein, unless otherwise indicated.
 28 ⁸ Exhibits cited herein are attached to the Declaration of J. David Hadden filed concurrently herewith.

1 Office that:

2 • “[P]artitioning code for accessing web services into an Application and a Player has
 3 an advantage for maintaining websites. Thus, for example, code that is device specific
 4 may be maintained **separately** from code that [sic] web service specific.” (Exh. 8 at
 5 XMO_00002998.)
 6
 7 • “[T]he claimed invention, in contrast, operates by **partitioning** the code required for
 8 functionality into device-independent code and device-dependent code. The inventors
 9 have found that this greatly simplifies providing software to a variety of devices.”
 10 (Exh. 7 at XMO_00002938.)

11 Based on this intrinsic record, all three district courts that have previously addressed the Application
 12 term construed the Application to be “separate from” the Player. (Exh. 15 at
 13 DEFSEXTRINSIC_XMO_00000392-393; Exh. 16 at DEFSEXTRINSIC_XMO_000000047; Exh.
 14 17 at DEFSEXTRINSIC_XMO_00000563-64.)⁹

15 Express Mobile’s opening brief undermines its position. Express Mobile argues that the
 16 “separate from” requirement is superfluous, yet Express Mobile acknowledges the distinction is
 17 correct, because the claims “separately recite” an Application and a Player having a “separation” of
 18 functions. Defendants’ proposed construction clarifies and confirms the separation required between
 19 the Application and Player, whereas Express Mobile’s proposed construction ignores it. Similarly,
 20 Express Mobile seeks to avoid three prior claim construction orders from different district courts by
 21 referencing an embodiment in which the Application and Player are allegedly integrated. Opening
 22 Br. at 5. But the *Shopify* court considered this very embodiment and concluded that it did *not* show
 23 an integrated, single Player/Application as Express Mobile contends. Exh. 25 at 7-8. This portion of
 24 the specification in fact describes an “abstraction interface” that “separates” the server-side facilities
 25 that relate to the Application from the Player, where the “abstraction interface” provides a means for
 26 the two separate codes to interact. (’755 patent at 7:30-37; Declaration of Christopher Schmandt
 27 (“Schmandt Decl.”) ¶¶ 37-39.) The reference to “extend the Application on the Player” concerns the
 28 interpretation or execution of the Application by the Player to facilitate a “client/server” interaction.
 (Id.)

29
 30 ⁹ Express Mobile acknowledged in a different litigation that the prosecution statements “reflected the
 31 fact that the application and player were separate.” (Exh. 27 at 72:5-7.) Its expert agreed in
 32 deposition. (Exh. 19 at 175:24-176:16.)

1 **2. The Application is interpreted or executed by the Player.**

2 Consistent with the fact that a “Player” must play something, the specification discloses that
 3 the claimed Player interprets or executes the instructions in the Application:

- 4 • “The device’s Player **interprets or executes** the Application to generate one or more
 5 ‘pages’ . . . The Player may include code that is device-specific—that i[s], each device
 6 is provided with a Player that is used in the interpretation and execution of
 7 Applications.” (’755 patent at 6:6–11.)
- 8 • “The Player then **interprets** the Application Page extracted from PDL which in turn
 9 defines all of the virtual machine compliant Objects . . .” (*Id.* at 11:44–51.)
- 10 • “The intended programming is carried out on device 130 when the device, **having the**
 11 **appropriate device platform Player**, receives and **executes** the device-independent
 12 Application.” (*Id.* at 13:46–49.)

13 (*See also id.* at 2:1–3 (“Application that is a device independent code that [is] **interpreted** by the
 14 Player”).) This makes sense because the parties agree that the Application is device-independent
 15 code for a web page. Something must execute or interpret the Application on specific devices for it
 16 to run. And that something is the Player. (Exh. 8 at XMO_00002998.; Exh. 7 at XMO_00002934;
 17 Schmandt Decl. ¶ 45.)

18 During prosecution, the applicants also repeatedly characterized the “Application” as being
 19 interpreted or executed by the Player. For example, to overcome the *McCain* prior art, the applicants
 20 argued that “the Player interprets the Application and dynamically provides information . . . on the
 21 display of the device.” (Exh. 4 at XMO_00002802.) In response to an additional office action, the
 22 applicants argued that “[t]he **present application** teaches . . . the Player (being device-dependent) is
 23 executed to interpret non-binary, device independent [code] contained in the Application” to
 24 overcome an obviousness rejection over the McCain, Benedetti, and Paddon references. (Exh. 7 at
 25 XMO_00002934.) These statements help define the claimed “Application” in distinguishing the
 26 alleged invention from the cited prior art. *See, e.g., Personalized Media Commc’ns, LLC v. Apple*
Inc., 952 F.3d 1336, 1345 (Fed. Cir. 2020) (“repeated and consistent statements during prosecution”
 27 determined claim scope, “even if those statements do not rise to the level of a disclaimer”); *Shire*
Dev., LLC v. Watson Pharms., Inc., 787 F.3d 1359, 1366 (Fed. Cir. 2015) (“Although the prosecution
 28 history statements do not rise to the level of unmistakable disavowal, they do inform the claim

1 construction.”); *Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 977 (Fed. Cir. 2014) (“[T]he
2 prosecution history … serves as intrinsic evidence for purposes of claim construction.”).

3 In contrast, the intrinsic record does not describe any embodiments where the Application is
4 not interpreted or executed by the Player. *See, e.g., iLOR, LLC v. Google, Inc.*, 550 F.3d 1067, 1073–
5 74 (Fed. Cir. 2008) (affirming construction of “toolbar being displayable” as “the toolbar is
6 ‘automatically displayed’” because specification did not disclose embodiments with user action to
7 display toolbar); *Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355, 1367 (Fed. Cir. 2021)
8 (construing “communication session” to be bidirectional because “all references to the *claimed*
9 communication session . . . describe this session as bidirectional.”); *Durel Corp. v. Osram Sylvania*
10 *Inc.*, 256 F.3d 1298, 1304 (Fed. Cir. 2001) (construing “oxide coating” to require “binary compounds
11 containing only metal cations and oxygen” because “all of [the examples in the specification] are
12 binary compounds containing only metal cations and oxygen”).

13 Express Mobile’s cited intrinsic evidence is not to the contrary. For example, Express Mobile
14 relies on a portion of the specification that teaches: “[t]he intended programming is carried out **on**
15 device 130 when the device, **having** the appropriate device platform **Player**, receives and **executes**
16 the device-independent Application.” (’755 patent at 13:46–49.) It is only the device with the
17 “appropriate” Player that can receive and execute the Application because, as the specification and
18 file history repeatedly explain, it is the Player that executes or interprets the Application. *Phillips v.*
19 *AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (a POSITA “is deemed to read the claim terms .
20 . . in the context of the entire patent”). (*See, e.g.*, ’755 patent at 6:6–11 (“Player interprets or executes
21 the Application”); 11:44–51 (“Player then interprets the Application”); 2:1–3 (“Application . . .
22 interpreted by the Player”); 13:46–49 (“Player, receives and executes the device-independent
23 Application”); Exh. 4 at XMO_00002802 (“the Player interprets the Application”); Exh. 7 at
24 XMO_00002934 (“Player (being device-dependent) is executed to interpret . . . the Application”).)¹⁰

25
26 ¹⁰ The court in *Shopify* considered only two statements in the intrinsic record, and found “both these
27 statements, however, appear to be describing embodiments.” (Exh. 25 at 8.) In the instant case,
Defendants present a more extensive record of evidence, as set forth above. Respectfully, Defendants
disagree with the *Shopify* court’s conclusion, particularly where nothing in the intrinsic record
suggests an alternative embodiment and nowhere does the specification explain how the device-
independent Application is interpreted or executed without the Player, which ‘plays’ it.

1 This is further reflected in the claims, which require the Application to be “executed *on* the device,”
 2 not “by” the device. Indeed, Express Mobile fails to identify what specifically “on” the device
 3 performs the execution or interpretation, and merely takes a vague, generalized position that the
 4 “device itself” does it. But the intrinsic record repeatedly identifies, without contrary disclosures,
 5 that the Player “on” the device interprets or executes the Application. Neither Express Mobile nor
 6 the intrinsic record identifies anything “on the device” other than the claimed Player that performs
 7 the necessary interpretation or execution of the device-independent code. (Schmandt Decl. ¶¶ 50-
 8 51.) The claims provide for an Application that is device-independent code that must be interpreted
 9 or executed for the device to use for display. ('755 patent at 37:29-46; '287 patent at 38:15-25; '044
 10 patent at 38:26-27; Schmandt Decl. ¶ 77.) The purpose of the claimed Player, and the two-code
 11 structure of the alleged invention, is to provide a Player having device-specific code that can interpret
 12 or execute the device-independent Application for a device’s display. (Exh. 8 at XMO_00003002;
 13 Schmandt Decl. ¶ 62.)

14 The other portions of the specification cited by Express Mobile similarly support Defendants’
 15 construction and the requirement that the Application be interpreted or executed by the Player. ('755
 16 patent at 8:31-35 (“finished page that will be displayed on screen 137 when an Application can be
 17 intercepted, via a Player”); 34:51-64 (“Player . . . adapting the Application to the resources and
 18 limitations of any particular device”); 39:18-21 (dependent claim 21 confirming the Player
 19 “interprets” the Application, while providing further narrowing limitations that Player specifically
 20 interprets the Application’s “values of the web component”); Schmandt Decl. ¶ 57.) To be clear,
 21 nothing in these disclosures indicates something other than the claimed Player doing the necessary
 22 interpretation or execution of the Application. (Schmandt Decl. ¶ 58.) The Application is device-
 23 independent code that cannot be interpreted or executed without the Player, and Express Mobile has
 24 failed to cite any contrary intrinsic evidence. (Schmandt Decl. ¶ 63.)

25 **B. Player/player ('755 patent, '287 patent, '044 patent)**

Express Mobile’s Proposed Construction	Defendants’ Proposed Construction
software code that facilitates the execution of an application on a device	executable device-specific code that is separate from the Application/ application and that interprets or executes the

1	Application/ application
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2 Defendants incorporate by reference the argument for the “Application” to support its
 3 construction that the Player (1) is separate from the Application and (2) interprets or executes the
 4 Application. The parties’ remaining disputes focus on (1) whether the Player is device-specific code;
 5 and (2) whether the Player is executable code.

6 **1. The Player is “device-specific code.”**

7 As described above, the central purpose of the alleged invention was to provide to specific
 8 devices Players that would be operable on those devices to employ the device-independent code in
 9 the Application, thereby allowing the Application to provide enhanced functionality without
 10 providing code specific to each device. The specification correspondingly describes the Player as
 11 device-specific code, in contrast to the Application: “[D]evice- or device platform specific
 12 instructions for processor 135 of the device, **referred to herein and without limitation as a ‘Player,’**
 13 and a device-independent program, referred herein and without limitation as an ‘Application.’” (’755
 14 patent at 5:8-14; *see also id.* at Abstract (“Devices are provided with Players specific to each device
 15 and Applications that are device independent.”).) The patentee’s characterization of the Player as
 16 device-specific code is repeated throughout the specification. (*See, e.g.*, ’755 patent at 5:49-55 (“A
 17 Player need be provided once or updated as necessary ... the device-dependent programming is
 18 provided to a device only once (or possibly for some small number of upgrades”); 23:43-45 (“a
 19 Player specific to device 130 of FIG. 4B.”); 33:26-28 (“correct Player to a given device”); *see also*
 20 Schmandt Decl. ¶¶ 56, 79-80 (discussing how specification repeatedly describes the “player” as
 21 device-specific code).)

22 The applicants said the same thing during prosecution. In the appeal brief that led to the ’755
 23 patent issuance, the applicants expressly stated that “a Player is device-dependent code.”

24 The present patent application consistently use[s] the words ‘Application’ (with a
 25 capital A) and ‘Player’ (with a capital P) to refer to code that is provided to devices
 26 for accessing web services, where **an Application is device-[in]dependent code¹¹** and **a Player is device-dependent code**.”

27 **¹¹ This quote has an obvious typographical error when referring to “Application” as “device-**

1 (Exh. 8 at XMO_00002999-3000 n.2 (emphasis in original).) The applicants explained that the
 2 advantage of the claimed invention was to have a device-specific Player on the one hand, and a device-
 3 independent Application on the other, to enable updates of only device-specific or device-independent
 4 code, without having to update the entire set of code at once.

5 In one aspect of the present invention, the device-independent Application and **device-**
 6 **dependent Player** are both provided to a device, such as a smartphone. . . . If a new
 7 device comes on the market, or if it is found that the **device-dependent code for a**
specific device needs an update, a new Player is developed and provided to those
 8 specific devices. Likewise, if new capabilities are provided for certain web services,
 or if new web service is available, then a new Application is developed for those web
 services.

9 (*Id.* at XMO_00002998; *see also* Exh. 7 at XMO_00002938 (“The files include a Player (sometimes
 10 referred to herein as a “first code”) specific to each device (that is, the code is “device-dependent”)
 11 and an Application (sometimes referred to herein as a “second code”) that is device independent.”).)
 12 Indeed, during prosecution, the applicants distinguished their claimed invention from the prior art on
 13 the ground that the claimed invention had a device-specific “player” and a device-independent
 14 “application.” (Exh. 44 at XMO_00002803 (“There is no teaching or suggestion in *McCain* of an
 15 authoring tool that provides two separate codes: a device-dependent code (such as the claimed Player)
 16 and device-independent code (such as the claimed Application).”).)

17 Based on this evidence, the court in *Shopify* found that prosecution history disclaimer applies,
 18 and that the claimed Player is device-specific code. Express Mobile’s effort to avoid that conclusion
 19 is undercut by the prosecution evidence above, which it largely fails to even address. (Exh. 8 at
 20 XMO_00002999-3000 n.2; *id.* at XMO_00002998; *see also* Exh. 7 at XMO_00002938; Exh. 4 at
 21 XMO_00002803.) The *Shopify* court correctly noted that the applicants cited the device-specific
 22 Player (along with the Application) as “central to the invention” and “key innovations over the prior
 23 art of *McCain*.” *Shopify Inc. v. Express Mobile, Inc.*, No. CV 19-439-RGA, 2020 WL 3432531, at
 24 *6 (D. Del. June 23, 2020) (citing to *Purdue Pharma L.P. v. Endo Pharm. Inc.*, 438 F.3d 1123, 1136
 25

26 dependent code,” which should be device-independent code. The error is clear from the other
 27 statements in the same filing. (*See, e.g.*, Exh. 8 at XMO_00003002 (“the code is by necessity device-
 28 dependent, and is not equivalent to the claimed ‘Application.’”)) Express Mobile agrees a similar
 typographical error was made in ’755 patent claim 12. (Joint Claim Constr. Statement, Exh. A
 (“where said Application is a device-[in]dependent code”)).

1 (Fed. Cir. 2006)). Regardless, as the *Shopify* court also found, even if the prosecution evidence does
 2 not rise to the level of disclaimer, the applicants’ “repeated and consistent remarks” still inform the
 3 construction of “Player” to be “device specific.” *Id.* at 6 (citing *Personalized Media Commc’ns, LLC*
 4 v. *Apple Inc.*, 952 F.3d 1336, 1340 (Fed. Cir. 2020)).

5 Also, none of the specification passages that Express Mobile cites supports its argument that
 6 the “Player” could be device-independent code, like the Application. Each citation supports
 7 Defendants’ construction or is irrelevant. (Schmandt Decl. ¶¶ 56, 72 (explaining each citation).) For
 8 example, Express Mobile points to the specification reference to “no device specific dependencies,”
 9 but a POSA would have recognized that this language describes the operating language, not the
 10 Player.¹² (’755 patent at 1:55-67; Schmandt Decl. ¶ 70.) Regardless, the Court in *Shopify* agreed that
 11 the “single reference to ‘no device specific dependencies’ is not enough to override the repeated
 12 references in the prosecution history and the specification to the ‘device-specific’ or ‘device-
 13 dependent’ Player.” *Shopify*, 2020 WL 3432531, at *6.

14 Although Express Mobile also argues that the claims of the ’044 patent differ from the claims
 15 of the ’755 and ’287 patents, it never explains why such difference matters, or why any such
 16 difference supports construing Player as encompassing device-independent code.¹³ Specifically,
 17 Express Mobile argues that the ’044 patent claims a Player that “utilizes information stored in [a]
 18 database to generate for the display of at least a portion of said one or more web pages,” whereas
 19 the ’755 and ’287 claims do not recite a database requirement (Opening Br. at 12), but fails to explain
 20 how this would change the Player from being device-specific code. Using a database does not change
 21 the Player from being device-specific, and there is no embodiment that suggests otherwise.

22
 23 ¹² Express Mobile also argues that the specification states the Player “may”—but not “must”—
 24 “include code that is device-specific.” This, however, does not suggest that a Player is not device-
 25 specific, particularly given the repeated references to the device-specific Player in the specification
 26 and prosecution history.

27 ¹³ Express Mobile points out that the claims of the ’044 patent refer to player with a lowercase “p”
 28 and do not include explicit claim language specifying that the player is “a device-dependent code.”
 29 (Opening Br. at 8.) But in prior litigation, Express Mobile’s expert acknowledged he was not
 30 advocating for a different construction of Player based on capitalization, and the term was construed
 31 consistently across all three patents. (See Exh. 19 at 189:20-190:3; Exh. 16 (setting forth the Court’s
 32 construction of “Player / player” in the ’755, ’287, and ’044 patents).)

1 (Schmandt Decl. ¶ 81.) Moreover, Express Mobile proposes the same construction for “Player” and
 2 “Application” for all three patents despite various differences in the claims.

3 Express Mobile’s effort to distinguish the ’044 patent based on its prosecution history
 4 similarly fails. Its citation to a single page in the ’044 patent prosecution history does not characterize
 5 the ’044 claimed Player as different than the Player in the ’755 or ’287 patent claims. And, while
 6 Express Mobile now suggests that the statements in the ’755 prosecution history should not apply to
 7 the claims of the ’044 patent, the applicants expressly relied on the ’755 application during the
 8 prosecution of the ’044 patent to support issuance. (Exh. 9 at 9 (“The present application is a
 9 continuation application that claim priority to US Patent Application No. 12/936,395, which issued
 10 as US Patent No. 9,063,755. Applicants respectfully submit that the present application is patentable
 11 for at least the reasons as those patents. Applicants thus respectfully submit that the present
 12 application is in a condition for allowance”).) Statements in a parent application on common terms
 13 apply to child applications. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1343 (Fed. Cir.
 14 2015) (“A statement made during prosecution of related patents may be properly considered in
 15 construing a term common to those patents.”). Further, during the ’755 prosecution, the applicants
 16 asserted that the “present invention” (not just particular claims of that patent) has a “device-dependent
 17 Player.” (Exh. 8 at XMO_00002998.)

18 **2. The Player is “executable code.”**

19 This portion of Defendants’ proposed construction is supported by the intrinsic evidence as
 20 well. Express Mobile’s contrary suggestion that the claimed Player could constitute some sort of
 21 non-executable data structure is unsupported.

22 First, the claim language states that the claimed Player is “executed on a device” and “provides
 23 instructions for the display of the device” after receiving output values. (’755 patent, claims 1, 12;
 24 ’287 patent claims 1, 15; ’044 patent claims 1, 15.) Accordingly, the claim language confirms that
 25 the Player is executable, as it is required to be executed to perform an action.

26 Second, the specification repeatedly and consistently discloses the “Player” as executable
 27 code, and never discloses a contrary embodiment. Specifically, the Player code is executable, device-
 28

1 specific instructions for the processor of the device to create the display. ('755 patent at 5:10-12
 2 (describing the Player "device- or device-platform specific instructions for processor 135 of the
 3 device").) The Player provides executable code, including the instructions in the Application, to
 4 generate a display. (*Id.* at 13:46–49 ("The intended programming is carried out on device 130 when
 5 the device, having the appropriate device platform Player, receives and **executes** the device-
 6 independent Application.").) The specification never discloses an embodiment where the Player is
 7 not executable code because the processor of the device must utilize the Player—device-specific,
 8 executable instructions—to generate the display. (*Id.* at 5:10-12, 5:57-59, Schmandt Decl. ¶¶ 89-90.)
 9 Accordingly, Defendants' proposed construction is correct. *See iLOR*, 550 F.3d at 1073–74; *Free*
 10 *Stream*, 996 F.3d at 1367; *Durel*, 256 F.3d at 1304.

11 Third, the prosecution history also establishes that the Player is executable code. The
 12 applicants repeatedly identified the Player as such. (Exh. 8 at XMO_00002998 ("the device receives
 13 an executable code in the form of a Player"); *id.* ("The execution of the Player on the device causes
 14 the Application to be interpreted").) Further, the applicants distinguished device-specific code (i.e.,
 15 the Player) as executable code, in contrast to the Application, which is non-executable code. (Exh. 7
 16 at XMO_00002934 ("device dependent (executable) and device independent (non-binary)
 17 elements"); Exh. 4 at XMO_00002803 ("McCain thus clearly teaches combining all code (executable,
 18 device dependent code) as well as parameters (device-independent code")"; cf. Exh. 7 at
 19 XMO_00002934 ("non-binary, device independent [code] contained in the Application").)

20 Indeed, the applicants overcame the prior art on this very basis, arguing that the prior art did
 21 not disclose a discrete Player having executable, device-specific code on the one hand, and non-
 22 executable, device-independent code of an Application on the other:

- 23 • Prior art solution in *McCain* "includes **all** necessary code to do so: both *non-binary*
 24 *components* (such as URLs including locations of other components) and *binary*
 25 *components* (such as graphics, audio, or video, executable components)." (Exh. 4 at
 XMO_00002804.)
- 26 • "The present application teaches an authoring tool that generates an Application and a
 27 Player . . . wherein the **Player** (being device-dependent) is **executed** to interpret *non-*
 binary, device independent [code] in the *Application*." (Exh. 7 at XMO_00002934.)

28

1 • “There is no teaching or suggestion in *McCain* of an authoring tool that provides two
 2 separate codes: a device-dependent code (such as the claimed Player) and the device-
 3 independent code (such as the claimed Application).” (Exh. 4 at XMO_00002804.)

4 Because the applicants argued that a Player being executable code overcomes the prior art, the
 5 claimed “Player” must be executable code. *See, e.g., iLOR*, 550 F.3d at 1073–74 (affirming
 6 construction of “toolbar being displayable” as “the toolbar is ‘automatically displayed’” because
 7 applicants distinguished prior art during prosecution on the basis that the prior art required user action
 8 to display the toolbar); *Fenner Inv., Ltd. v. Cellco P’ship*, 778 F.3d 1320, 1325–26 (Fed. Cir. 2015)
 9 (“[T]he interested public has the right to rely on the inventor’s statements made during prosecution”).

10 Express Mobile’s attempt to use its expert declaration to argue that a Player is not necessarily
 11 executable must fail, as extrinsic evidence cannot contradict the unambiguous statements in the
 12 intrinsic record. *E.g., Phillips v. AWH Corp.*, 415 F.3d 1303, 1324 (extrinsic evidence cannot
 13 “contradict claim meaning that is unambiguous in light of the intrinsic evidence”). Express Mobile
 14 fails to provide any intrinsic evidence to support its position, and instead relies on its expert
 15 declaration and a citation to *Shopify* that do not, and cannot, contradict the intrinsic record. First, in
 16 *Shopify*, the parties and the court addressed a proposed construction, not at issue here, of “an
 17 executable file,” where Express Mobile argued in part that a Player need not be a single file. Second,
 18 as a practical matter, the entire discussion as to “executable” in *Shopify* was peripheral to the primary
 19 disputes, as the parties devoted less than 1 out of 89 pages of claim construction briefing to the issue
 20 of “an executable file.” (Exh. 31 at 73–74.) Claim construction briefing in that case was dominated
 21 by claim terms in U.S. Patent Nos. 6,546,397 and 7,594,168, neither of which is at issue here. And,
 22 that minimal briefing did not address the intrinsic record laid out above that consistently shows the
 23 Player is executable code, or explain that the intrinsic record discloses no embodiment of the Player
 24 or any characterization of the Player as non-executable code. In short, Defendants respectfully
 25 suggest that on this issue, the *Shopify* Court did not consider the full intrinsic record, which establishes
 26 that the “Player” is executable code.

27 Express Mobile’s expert’s related effort to re-interpret the specification statement that the
 28 Player can “adapt the Application to the resources and limitations of any particular device” (’755

1 patent at 34:51-64) fails to show the Player is non-executable code. (Schmandt Decl. ¶ 89.) To the
 2 contrary, this shows the Player is device-specific code that must execute instructions for adapting the
 3 Application to a specific device. ('755 patent at 34:51-64 ("adapt the Application" for the "particular
 4 device"); Schmandt Decl. ¶ 54 (explaining Player is executing for the adapting tasks).) Express
 5 Mobile's argument that a Player can "extend the operating software" is similarly unavailing as even
 6 its expert fails to explain why this statement is at all relevant. (Schmandt Decl. ¶ 65 (explaining not
 7 relevant).)

8 **C. device-dependent code / device dependent code ('755 patent, '287 patent)**

Express Mobile's Proposed Construction	Defendants' Proposed Construction
code that is specific to the operating system, programming language, or platform of a device	code for a specific device

12 Defendants' proposed construction is based on the specification, which repeatedly
 13 characterizes device-dependent code (in the form of a Player), as code for a specific device. For
 14 example, the specification discloses that different devices "may be operable using different sets of
 15 instructions," and "[i]n some embodiments, devices 130 are provided with some **programming** from
 16 authoring system 100 that is **particular to the device.**" ('755 patent at 4:66-5:7.) A user of the
 17 authoring system can provide instructions to each of a plurality of devices in the form of "device- or
 18 device-platform specific instructions," which are referred to as a "Player," and also a separate device-
 19 independent program, referred to as an "Application." (*Id.* at 5:8-15.) This differentiation allows
 20 "code that is device specific" to be "maintained separately from code that [is] web service specific."
 21 (Exh. 8 at XMO_00002998.) "If a new device comes on the market, . . . a new Player is developed
 22 and provided to those specific devices." (*Id.*)

23 The specification repeatedly and consistently equates "device-dependent" code with code for
 24 a specific device. (E.g., '755 patent at Abstract (stating that Players (*i.e.*, device-dependent code) are
 25 "specific to each device"), 3:58-62 (referring to "device-specific routines—that is, codes that are
 26 specific to the operating system, programming language, or platform of specific devices"), 5:10-11
 27 ("device- or device-platform specific instructions"), 5:43-44 ("a plurality of Players (for different
 28

1 devices 130)).)

2 Express Mobile suggests without merit that because the Player may “adapt[] the Application
 3 to the resources and limitations of any particular device” (Opening Br. at 13), the specification
 4 supports its proposed construction. This portion of the specification refers to “particular device[s]”
 5 and explains how a Player may account for device-specific requirements, consistent with Defendants’
 6 proposed construction. (’755 patent at 34:51-64.)

7 During prosecution, Express Mobile likewise equated “device-dependent code” with code
 8 “specific to each device.” When arguing for the allowance of its claims, Express Mobile again told
 9 the Patent Office that “device-dependent” code refers to code operable “on a specific device.” (Exh.
 10 7 at XMO_00002938.) Express Mobile repeated this characterization in its appeal to the Patent Trial
 11 and Appeal Board, equating “device-dependent” with “specific to each device”: “a
 12 Player . . . specific to each device (that is, the code is ‘device-dependent’)” (Exh. 8 at
 13 XMO_00002998, XMO_00003002 (“[S]ince the code is generated to run on a specific device, ...
 14 McCain is teaching the generation of a Player.” (original emphasis omitted))).

15 Defendants’ construction of “device-dependent” code also tracks the conventional meaning
 16 of that term as demonstrated by reliable extrinsic evidence. *See Pitney Bowes, Inc. v. Hewlett-*
Packard Co., 182 F.3d 1298, 1308 (Fed. Cir. 1999) (“[I]t is entirely appropriate, perhaps even
 17 preferable, for a court to consult trustworthy extrinsic evidence to ensure that the claim construction
 18 ... is not inconsistent with clearly expressed, plainly apposite and widely held understandings in the
 19 pertinent technical field.”). The IBM Dictionary Computing (1994) defines “device-dependent” as
 20 “[p]ertaining to a program that can be executed successfully only if particular types of devices are
 21 available.” (Exh. 14 at DEFSEXTRINSIC_XMO_00000053.) That definition contrasts with the
 22 definition for “device-independent,” which means “[p]ertaining to a program that can be executed
 23 successfully without regard for the characteristics of particular types of devices.” (*Id.*) As another
 24 example, the Microsoft Press Computer Dictionary defines “device dependence” as the “requirement
 25 that a particular device be present or available for the use of a program,” unlike “device
 26 independence,” which means a program “that produce[s] similar results on a wide variety of
 27

28

1 hardware.” (Exh. 13 at DEFSEXTRINSIC_XMO_00000057; *see also* Exh. 12 at
 2 DEFSEXTRINSIC_XMO_00000060 (same).)

3 Express Mobile urges this Court to accept its construction because it was adopted in *Shopify*
 4 *Inc. v. Express Mobile, Inc.*, Civ. No. 19-439-RGA. (See Exh. 25.)¹⁴ Yet in *Shopify*, neither party
 5 proposed this construction, but the Court adopted it because “[t]he specification at one point defines
 6 ‘device-specific’ routines as ‘codes that are specific to the operating system, programming language
 7 or platform of *specific* devices.’ (*Id.* at 15 (quoting ’755 patent at 3:58-62).) The problem with the
 8 *Shopify* Court’s construction, however, and Express Mobile’s proposed construction here, is that it
 9 omits the second “specific,” which confirms that “device-dependent code” is for specific devices.
 10 Moreover, the specification portion relied on by Express Mobile (’755 patent at 3:58-62) rests on an
 11 important, stated caveat: after listing some examples of device-specific code, the ’755 patent states
 12 “[i]t is understood that the invention is not so limited, except as provided in the claims” (’755
 13 patent at 3:64-65.) The day the ’755 patent was filed, Express Mobile filed a preliminary amendment
 14 to refocus the claims from a “platform” to a “device”: “produce device-specific code that, when
 15 executed on the platform device, provides said selected component on the display of the platform
 16 device.” (Exh. 2 at XMO_00001786.) Express Mobile explained that this was done “to more clearly
 17 recite the subject matter of the invention” because “the code runs on a device, which may form part
 18 of a platform.” (*Id.*) Throughout the subsequent prosecution, Express Mobile maintained that
 19 “device-specific” or “device-dependent” requirement, and never returned to a platform-dependent
 20 requirement.¹⁵ Because the claims were amended to require device-specific code, not platform-
 21 specific code, operating system-specific code, or programming language-specific code, the
 22 specification cannot overcome the consistent and repeated statements during prosecution by Express
 23

24 ¹⁴ Express Mobile misleadingly points to the *GoDaddy* case as having also decided this issue
 25 (Opening Br. at 12), but there the parties *agreed* to Express Mobile’s construction. (Exh. 15 at
 DEFSEXTRINSIC_XMO_00000383.)

26 ¹⁵ For context, it appears that Express Mobile’s proposed construction is based on Express Mobile’s
 27 desire to twist the meaning of “platform” to encompass any code that varies at all based on device
 characteristics. For example, Express Mobile refers to “conditional branching,” which refers to code
 28 that is sent to all devices, but only certain portions of it are run, depending on, for example, the version
 of the browser used on the device. Nothing in the specification or intrinsic record suggests that this
 is a type of “device-dependent” code contemplated by the patentee, despite the fact that such code
 had long been known in the art. (Schmandt Decl. ¶¶ 91-93; Exh. 20.)

Mobile that explained that “device-dependent code” meant code “for a specific device.”

D. device-independent code / device independent code ('755 patent, '287 patent)

Express Mobile's Proposed Construction	Defendants' Proposed Construction
No construction necessary; <i>Alternative</i> : code that is not specific to the operating system, programming language, or platform of a device	code that is not for a specific device

The plain and ordinary meaning of “device-independent code” is simply the inverse of “device-dependent code”: code that is **not** for a specific device. As explained above, the specification and Express Mobile’s consistent representations to the Patent Office support interpreting “device-**dependent** code” as “code that **is** for a specific device,” and likewise support interpreting device-**independent** code” as “code that **is not** for a specific device.”

E. web component ('755 patent, '287 patent, '044 patent)

Express Mobile's Proposed Construction	Defendants' Proposed Construction
one or more functionalities associated with one or more web page elements to be displayed on a device	software object that provides functionalities of a web service

The parties agree that web components relate to “functionalities,” but dispute whether those components provide the functionalities of web services (Defendants’ proposed construction) or are associated with one or more web page elements to be displayed on a device (Express Mobile’s construction). Defendants’ proposed construction, to which Express Mobile agreed and which the *GoDaddy* court adopted,¹⁶ is consistent with the claims, specification, and prosecution history. (See Schmandt Decl. ¶¶ 91-93.)

The specification describes that web components are the software objects that provide functionalities associated with a web service. (See '755 patent at 2:33-34, 8:18-26, 8:36-47, 8:58-63, 22:15-17, 22:40-43, 25:6-15, Figs. 3E, 3F; Schmandt Decl. ¶¶ 101-103; *see also* Opening Br. Exh. 1, Weadock Decl. ¶ 43 (agreeing that “[w]eb components comprise functionalities associated with, for example, web services”)). Specifically, the specification explains that “components” of web services

¹⁶ Exh. 15 at DEFSEXTRINSIC XMO 00000387.

1 are registered in a “web component registry” that may be used by a user of the authoring platform to
 2 “bind web services 230 to elements to be displayed on the device 130.” (’755 patent at 8:18–26; *see*
 3 *also id.* at 8:36–47.) The specification provides the following example: third-party web service Yahoo
 4 Maps may be placed “into device 130 by binding the required component of the Yahoo Maps Web
 5 Service, such as Yahoo Map’s Inputs and/or Outputs to appropriate Objects of authoring platform
 6 110.” (’755 patent at 10:4–9.) The “web components” are the software objects that provide the
 7 “inputs and outputs” functionality for the Yahoo Maps Web Service. Thus, the specification teaches
 8 that web components are the software objects that provide functionalities of a web service, which
 9 *may* be associated with UI objects on a screen providing access to those services.

10 The file history, which includes the priority documents further describing web components,
 11 provides additional support for Defendants’ proposed construction. For example, one of these
 12 documents describes an Appendix of “Web Component Models.” (Exh. 1 at XMO_00002265.)
 13 These exemplary models are XML-formatted documents that define inputs and outputs for various
 14 web services. (*Id.* at XMO_00002266–2279.) They specify how the web components provide the
 15 functionality of the web services to the user of the device.

16 Moreover, a technical glossary that is part of the prosecution history provides further clarity
 17 and support. Specifically, Express Mobile relied on the W3C glossary definitions to explain its
 18 purported invention. (See Exh. 5 at XMO_00002852–2853; Exh. 6 at XMO_00002876–2877;
 19 Schmandt Decl. ¶¶ 98–99.) The W3C glossary defines “component” as follows:

20 **A component is a software object**, meant to interact with other components,
 21 **encapsulating certain functionality or a set of functionalities**. A component has a
 22 clearly defined interface and conforms to a prescribed behavior common to all
 23 components within an architecture.

24 (Exh. 22 at 4.) Defendants’ construction properly accounts for and reflects this established meaning
 25 for “component” as a software object providing functionality, as would have been understood by a
 26 POSA. (Schmandt Decl. ¶¶ 98–99.)

27 In contrast, Express Mobile’s proposed construction defines web component as merely
 28 “functionalit[y] associated with one or more *web page elements*.” This proposal is untethered to the

1 claimed invention, inconsistent with the W3C glossary and how a POSA would have understood the
 2 term, overly broad, and unhelpful to understanding the term. (Schmandt Decl. ¶¶ 103-105.)

3 First, Express Mobile's construction seeks to replace "web services" with "web page
 4 elements," which is not supported by the specification or the claims. Indeed, the two are not the same;
 5 an element of a web page could be a static piece of text or a jpeg displayed on a web page, whereas a
 6 web service is a software system designed to support interoperable machine-to-machine interaction
 7 over a network. (Schmandt Decl. ¶¶ 106-107; '755 patent at 1:33-36, 8:18-19.) Information from a
 8 web service *can* be bound to and displayed using elements and UI objects as described in the
 9 specification. (See '755 patent at 8:24-26.) But such "elements and UI objects" are not necessarily
 10 "web page elements"—indeed, the specification distinguishes "web pages" from "Application
 11 pages." (*Id.* at 12:4-10.) And functions of such "elements and UI objects" are not necessarily
 12 provided by web components or web services. (*Id.* at 6:31-47.) By treating web component as
 13 functionality of anything that is displayed as part of a web page, Express Mobile impermissibly
 14 broadens this term to cover any navigation or display effect on a web page. (Schmandt Decl. ¶¶ 106-
 15 107.)

16 Second, the intrinsic evidence Express Mobile cites does not support its construction. The
 17 cited passages describe how the author of an Application *can* bind web components defining web
 18 services to UI objects ('755 patent at 2:33–34, Fig. 3E and 3F, 22:15-17, 22:40–43) using the registry
 19 of available web components (*id.* at 8:22–26), but Express Mobile's construction mandates that web
 20 components defining web services are bound to UI objects.

21 Third, Express Mobile's construction conflicts with the understanding of a POSA in light of
 22 the specification disclosures and technical glossary described above. (Schmandt Decl. ¶¶ 106-107.)

23 Fourth, the addition of "associated with one or more web page elements to be displayed on a
 24 device" in Express Mobile's construction—other than improperly conflating a web service with a
 25 web page or other application display—is superfluous, as the claim language discloses how the web
 26 components are associated with UI objects (i.e., elements to be displayed on a device). (See, e.g.,
 27
 28

1 '755 patent at claim 1 ("associate the selected symbolic name with the defined UI object"); *id.* at
 2 claim 12 (similar); '287 patent at claims 1 and 15 (similar); '044 patent at claims 1 and 15 (similar).)

3 Express Mobile fails to meaningfully challenge the construction that Defendants propose and
 4 that it agreed should apply in *GoDaddy*. Express Mobile argues—without explanation—that
 5 Defendants' proposal is "imprecise," but Express Mobile fails to explain why. Moreover, Express
 6 Mobile's proposed construction introduces unnecessary ambiguity into the claims through the
 7 proposed "associated with" language, which Express Mobile asserts means "intertwined." (Opening
 8 Br. at 14.) That Express Mobile's proposed construction itself requires construction further confirms
 9 how Express Mobile's construction would ultimately be confusing and unhelpful to a jury. Express
 10 Mobile also argues that because a web component may have "subordinate output UI objects,"
 11 Defendants' construction improperly limits a web component to one "software object." (Opening Br.
 12 at 14.) Not so. "Subordinate output *UI objects*" refer to just that: UI objects, not the software object
 13 that comprises the web component.

14 **F. Each symbolic name has an associated data format class type corresponding to
 15 a subclass of User Interface (UI) objects that support the data format of the
 16 symbolic name¹⁷ ('287 patent, '044 patent)¹⁸**

17 This claim limitation, which appears in the asserted claims of both the '287 and '044 patents,
 18 is indefinite for two independent reasons.

19 First, the limitation refers to a "data format class type," but that term is not found in the
 20 specification, the file history, or otherwise mentioned at all. Both "data type" and "data format" are
 21 used, but there is no explanation of how those terms relate to "data format class type," "class type"
 22 or "classes" at all, so a POSA would have been unable to discern what the inventor was claiming
 23 when referring to "data format class type." (Schmandt Decl. ¶¶ 109, 113.)¹⁹ Thus, the patentee

24 ¹⁷ The SAP and Adobe defendants do not join this construction.

25 ¹⁸ To reduce the issues necessary for the Court to decide, Defendants agree that the plain and ordinary
 26 meaning of the terms "computer memory storing a registry of symbolic names / computer memory
 27 storing symbolic names" and "said player utilizes information stored in said database to generate for
 28 the display of at least a portion of said one or more web pages" should apply in these cases.

¹⁹ Express Mobile's reliance on Mr. Schmandt's reports from the *Shopify* litigation are misplaced. In
 his reply report relating to invalidity, Mr. Schmandt noted that "Dr. Almeroth provides one potential
 explanation for what the claim language means," but also opined that "it is not the only one, and the

1 “fail[ed] to inform with reasonable certainty those skilled in the art about the scope of the invention,”
 2 and the asserted claims are invalid. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901
 3 (2014). Express Mobile’s position that “data format class type” means “data type”²⁰ would eliminate
 4 two of the four words from the term, finds no support in the intrinsic record, and contravenes
 5 longstanding Federal Circuit precedent cautioning against reading words out of the claim. *See*
 6 *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1582 (Fed. Cir. 1996) (rejecting a
 7 claim construction that would read out claim language and recognizing that the court must “give
 8 meaning to all the words in [the] claims.”) (citation omitted). Significantly, after prevailing on
 9 summary judgment of no indefiniteness in the *Shopify* case,²¹ Express Mobile backtracked on its
 10 assertion that data format class type means “data type,” and instead proposed that the term means
 11 “data type associated with a class of UI objects,” not just a “data type.” (Exh. 26 at 1.) Despite this
 12 new construction in the *Shopify* case, Express Mobile simultaneously argues that the term should
 13 mean “data type” in this case. Express Mobile’s inconsistent positions regarding how a POSA would
 14 have understood “data format class type” confirms that this claim limitation is indefinite.²²

15 Second, the term “subclass of User Interface (UI) objects” also renders this claim limitation
 16 indefinite. The specification of the asserted patent offers no guidance on how to determine a “class
 17 of UI objects,” let alone what is sufficient to constitute a “subclass” of these objects. (Schmandt Decl.
 18 ¶¶ 115-116.) Express Mobile argues that a POSA would have looked to Table 1 of the ’287 patent
 19 and understood that a “subclass” corresponds to a “subset” of UI objects available for a given data

20 specification provides no guidance on how to determine which explanation governs.” (Opening Br.
 21 Exh. 19, Schmandt Reply Rpt. ¶ 1433.) And in Mr. Schmandt’s opening report on invalidity, he
 22 reiterated his opinion that the term “subclass of user interface (UI) objects” rendered the asserted
 23 claims indefinite, but even under Express Mobile’s interpretation, the asserted claims are invalid in
 24 light of the prior art. (*See, e.g.*, Exh. 23 ¶ 1054 (noting that he was applying Express Mobile’s
 25 construction).) Express Mobile fails to attach or address this portion of Mr. Schmandt’s report.

26 ²⁰ Exh. 28 at 23; *see also* Exh. 29 ¶¶ 1142–1147.

27 ²¹ Defendants respectfully disagree with the Court’s decision in *Shopify*, which appears to have been
 28 premised, at least in part, on the fact that the term “data format class type” was not identified for
 construction. (Exh. 30 at 54.)

22 Express Mobile’s new interpretation of “data format class type,” recently proffered in the *Shopify*
 23 case, makes no sense because the claim would then read “data type associated with a class of UI
 24 objects corresponding to a subclass of User Interface (UI) objects.” (*See* Exh. 34.) Jurors would be
 25 confused about how and why a data type can both be associated with a class of UI objects, but also
 26 correspond to a subclass of UI objects as the claim explicitly requires. (*Id.*)

1 type. (Opening Br. at 17 and Exh. 1, Wedock ¶¶ 46-47.) But Express Mobile is again rewriting the
2 claim language and, in doing so, skips over the fact that before identifying a “subclass,” the POSA
3 would necessarily need to identify the “class” from which it is derived. Express Mobile offers no
4 explanation of how a POSA would segregate all available UI Objects into different classes and,
5 therefore, a POSA would not be certain whether a given subset of UI objects is in fact a subclass.
6 Indeed, if Express Mobile’s argument were accepted, there would be no need for the claims to refer
7 to a “subclass of User Interface (UI) objects” at all and could instead, have simply been drafted to
8 require a “data format class type corresponding to User Interface (UI) Objects.” While Express
9 Mobile may now regret drafting the claims to include the specific concept of a “subclass” of UI
10 objects, that is no reason to rewrite the claims as Express Mobile suggests. As drafted, the scope of
11 this limitation would be uncertain to a POSA, which renders the claims in which it appears indefinite.

G. preferred UI object ('287 patent, '044 patent)

Express Mobile's Proposed Construction	Defendants' Proposed Construction
a UI object associated with a data type that is favored	a UI object associated with a data type that is favored over the other UI object candidates for that data type

In three prior litigations, Express Mobile previously agreed to the construction of a “preferred UI object” as “a UI object associated with a data type that is favored **over the other UI object candidates for that data type.**” (Exh. 31 at 3; Exh. 16 at 3; Exh. 32 at 1; Exh. 33 at 2.) Yet here, for the first time, Express Mobile offers a different, and broader, construction for this term that eliminates the requirement that the associated data type is favored “**over the other UI object candidates for that data type.**” Express Mobile offers no basis for departing from the Court’s previous construction of this limitation, which it expressly agreed to. Express Mobile’s new construction appears designed to encompass systems in which only one UI object is available for selection (as opposed to systems that have multiple UI objects, from which one “preferred” object is selected). Express Mobile’s construction is inconsistent with the ordinary meaning of what it means for something to be “preferred.” (i.e. “to choose one thing rather than something else because you like it better”). (See

27 Exh. 24 Oxford Learner's Dictionaries at

1 https://www.oxfordlearnersdictionaries.com/definition/english/prefer#:~:text=to%20like%20one%20thing%20or%20person%20better%20than,anyone.%20A%20local%20firm%20is%20to%20be%20preferred.)

4 Further, Express Mobile’s construction is inconsistent with the patent specification, which
 5 makes clear that UI objects are associated with certain data types and there are preferred input and
 6 output objects for each data type. (*See* ’287 Patent at Table I; 14:34-67, 17:23-31.) For example, the
 7 specification describes that possible UI objects include text fields, objects, lists, check boxes, URLs,
 8 and buttons among others. (*See id.*) Given that there are many potential UI objects for the authoring
 9 tool to select from, a “preferred UI object” is selected from UI object candidates and is therefore
 10 “favored over the other UI object candidates for that data type.” The Court should deny Express
 11 Mobile’s attempt to now offer a new construction that departs from Express Mobile’s previously
 12 agreed-to construction, the specification, and the ordinary meaning of this limitation.

13 The only purported support Express Mobile offers for its proposed construction is Table I of
 14 the specification, which lists various data types and associated input and outputs. However, Table I
 15 does not include the claimed “preferred UI object.” While Table I has two column headings that refer
 16 to “preferred” inputs/outputs for which there is only one candidate, these headers do not refer to “a
 17 preferred UI object.” The claimed “preferred UI object” is specified in the claims to be a UI object
 18 selected from a subclass of User Interface (UI) objects, either by the user or automatically. Thus, the
 19 preferred inputs/outputs for which there is only one candidate in Table I are not the claimed “preferred
 20 UI object.”

21 The fact that the claim refers to a preferred UI object (singular) from a “subclass of UI objects”
 22 (plural) confirms that a POSA would not have understood “preferred UI object” to encompass a
 23 scenario where only one object is available for selection. Thus, the preferred inputs/outputs for which
 24 there is only one candidate in Table I are not the claimed “preferred UI object.” Indeed, it would
 25 make no sense to refer to anything as a preferred option if that is the only option available. Nor does
 26 Express Mobile’s solution to simply excise the phrase “over the other UI object candidates for that
 27 data type” make sense, since it would undoubtedly cause jurors to wonder “favored over what?”

28

1 Accordingly, consistent with the plain and ordinary meaning of the word preferred, as well as
2 the prior agreed-upon construction of this term, Defendants' proposed construction should be
3 adopted.

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5 DATED: November 12, 2021

Respectfully submitted,

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FILER'S ATTESTATION

Pursuant to Local Rule 5-1(i)(3), I attest that concurrence in the filing of this document has been obtained from each of the other signatories shown above and that all signatories have authorized placement of their electronic signature on this document.

By: /s/ J. David Hadden
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